AMENDMENTS TO THE CLAIMS

1. (original) An isolated polynucleotide comprising a nucleic acid sequence encoding geraniol synthase (GES), said GES being capable of converting geranyl diphosphate to geraniol.

2. (original) An isolated polynucleotide comprising a nucleic acid sequence selected from the group consisting of
   a. the nucleic acid sequence of SEQ ID NO:1;
   b. the complement of SEQ ID NO:1;
   c. a nucleic acid sequence which is at least 90% homologous to SEQ ID NO:I; and
   d. a nucleic acid sequence capable of hybridizing to either (a) or (b).

3. (original) The isolated polynucleotide according to claim 1 encoding the amino acid sequence of SEQ ID NO:2.

4. (currently amended) The isolated polynucleotide according to claim [[I]] 1 encoding an amino acid sequence which is at least 60%, preferably at least 70%, more preferably at least 80% or more, most preferably at least 90% homologous (similar + identical amino acids) to the amino acid sequence of SEQ ID NO:2.

5. (original) The isolated polynucleotide according to claim 1 encoding an amino acid sequence selected from the group consisting of SEQ ID NO:2, fragments, derivatives and analogs thereof

6. (original) A polypeptide having GES activity, said activity being characterized by converting geranyl diphosphate (GDP) to geraniol.

7. (original) The polypeptide according to claim 6 having the sequence of SEQ ID NO:2.

8. (original) The polypeptide according to claim 6 which is at least 60%, preferably at least 70%, more preferably at least 80% or more, most preferably at least 90% homologous (similar + identical amino acids) to the amino acid sequence set forth in SEQ ID NO:2.

9. (original) The polypeptide according to claim 6 selected from the group consisting of a polypeptide having the amino acid sequence of SEQ ID NO:2 and fragments, derivatives and analogs thereof.

10. (currently amended) An expression vector comprising the polynucleotide according to ~~any one of claims 1-5~~ claim 1.

11. (original) A host cell comprising the expression vector according to claim 10.

12. (original) A method for producing recombinant GES, the method comprising:
    a. culturing the host cell according to claim 11 under conditions suitable for the expression of GES; and
    b. recovering GES from the host cell culture.

13. (original) A method for producing geraniol, the method comprising:
    a. culturing the host cell according to claim 11 under conditions suitable for the expression and activity of the GES; and
    b. recovering geraniol from the host cell culture.

14. (original) A method for producing geraniol metabolites in the terpene biosynthesis pathway, the method comprising:
    a. culturing the host cell according to claim 11 under conditions suitable for the expression and activity of the GES; and
    b. recovering geraniol metabolites from the host cell culture.

15. (currently amended) The method according to claim [[16]] 14, wherein the ~~geraniot~~ geraniol metabolites are geranial and neral.

16. (currently amended) A prokaryotic organism comprising a polynucleotide sequence according to ~~any one of claims 1-5~~ claim 1 stably integrated into its genome.

17. (original) Use of geraniol obtained by the method according to claim 13 in a product selected from the group consisting of agricultural, cosmetic and food products.

18. (original) Use of a geraniol metabolite obtained by the method according to claim 14 in a product selected from the group consisting of agricultural, cosmetic and food products.